SCIENCE FOR THE PEOPLE

CALIFORNIA PLANTS.

Mr. Jos. F. James sends to The Botanical Gazette some notes on California plants, the re-Gazette some notes on California pantis, the result of a residence of a year and a half in Southern California, principally in the neighborhood of Los Augeles. One of the commonest plants in some localities seems to be the California Popa, or Eschschaltzia Californica. Where it Popa, or Eschschattzia Catifornica. Where it grows in large patches, as it frequently does, the blossoms make the ground appear of a most intense golden color, and when the sun is shining brightly upon them, the eye is duzgled by the blaze. It does not seem to occur at all east of the Wasatch Mountains, but is very common in the anighborhood of the wasatch. common in the neighborhood of Los Angele common in the neighborhood of Los Angeles. One of the prettiest wild flowers is the little blue annual of the seed stores, Nemophila insignis. Datura mekloides, a common weed, forms abush three or tour feet high, and is said to be well worth the attention of gardeners. Adenostoma faciculatum is the well-known greasewood, and forms nine-tenths of the vertex tion in many parts of the mountains. the vegetation in many parts of the mountains. It is a bushy shrub with awl-shaped leaves, and close clusters of white flowers. The roots are It is a bushy shrub with awi-snaped close clusters of white flowers. The roots are extensively used for fuel, and its presence on land is a sure indication of water at no great depth. Yucca Whipplei. Terr.. is very handsome. The flower stem is often ten feet high and is covered for about one-half its height with a dense mass of bell-shaped white flowers. With a dense mass of ben-shaped with hard. The leaves are long, serrulate, and with hard sharp points. When they get old they be-come frayed at the edges, hanging in long fila

ments on each side.

The pepper tree, Schinus Molle. Linn., one of the prettiest of trees, is used as a shade tree. The flowers are small, greenish white, in long racemes. The fruit is globular, of a deep red. color, and hangs in long bunches, contrasting beautifully with the pinnate leaves. It is not beautifully with the pinnate leaves. It is hot and peppery to the taste, and in Mexico, where the tree is native, it is known as Chiti pepper. From the broken leaves and branches exudes a white gummy substance, which is also peppery. Generally not very tall, it branches some eight or ten feet from the ground. The bark is rough and scaly, but the long pendulous branches and pinnate leaves are handsome. Blessoms twice a year, and is an evergreen, the branches never being bare of leaves. It is extensively planted in Southern California, but the climate of San Francisco is California, but the climate of San Francisco is not very suitable for its full development. Arctostaphylos glauca, Lindl., is the Manzamita of the mountains. Generally speaking it is a small tree or shrab, with very crooked branches. The wood is very hard and tough, and of a deep red color. The flowers are of a rose white, and in open racemes with very sticky wides and the leaves are thick and leather. pedicels, and the leaves are thick and leathery. It grows plentifully in some places in the mountains. Platanus racemosa, Nutt., is the representative of the sycamore of the East. It much the same habit of growth and general appearance, but the leaves are three to twe cleft instead of being toothed. The wood is so hard that it will often turn the edge of an axe or hatchet. It grows to be one of the largest trees of Southern California, and one in the yard of a brewery in Los Angeles must be between thirty and fifty feet in circumference.

THE TRANSIT OF VENUS.

At the January meeting of the British Royal Astronomical Society, Professor Newcomb, of Washington, who went to South Africa in charge of one of the American observing parties, gave a brief account of the result. The station selected was Weilesley, about forty-five miles northeast of Cape Town. On the morning of the transit, says the Professor, the sky was somewhat clouded, but the weather improved, and I think that during the hours of the transit, which commenced about 3 o'clock, the definition of the sun was as fine as I have ever seen i in my life. There was but one physical phenomenon that was worthy of note, and that was so well marked that it could not escape any one; it was a line of light that surrounded the dark hemisphere of Venus, which was off the sun. I looked very carefully before first contact, to see whether it was possible to see Venus projected upon the corona; but I was upuble to see any sign of the planet until it had actually entered upon the sun's disc. When it was half-way on, it appeared as if a piece of the sun had been it appeared as if a piece of the sun had been sharply cut out with a knife; and the line of light which has been described by so many ob-servers, and which I had looked for in vain before, began to show itself; but it was not con-tinuous all round the planet. On the contrary, tinuous all round the planet. On the contrary, it was only seen at certain points. As the internal contact approached, I found that the line of light slowly became brighter; and for some seconds before internal contact it was quite continuous, and was seen as a fine arc of light toining the cusps of the sun. It was so bright that it somewhat interfered with one's judgment in determining the time when the solar cusps met. The cusps were s soread out by irradiation, whereas the line of light around the planet was narrow and sharp. observed the cusps gradually dissolve into th line of light; and for a period of five seconds there was a certain hesitation, in my mind, as to the character of the phenomena, and whether the true geometrical contact had, or had not taken place. After that five seconds, the light began to flew in on either side with great rapid-ity; and after that I did not notice anything like a shade or ligament joining the planet and the

THE UNDULATORY THEORY OF LIGHT. In the last of a series of lectures just closed, by Professor Tyndall on "Light and the Eye," Leexpla ned why the undulatory had supplanted the emission theory of light. The air, which was the medium of conveying sound, might, he said, be compared with the luminferous ether. pervading all space. The ether's movements were undulatory, though the waves, like those of water in the chaotic feam of the Niagara Newtou's emission theory was first op posed by the celebrated astronomer Huyghens and the no less famous mathematician Euler and no scientist of any repute now upheld Newton's conception of light as an infinite number of projectiles impinging upon the eye. When tested by the facts, that action had uttelly broken down; whereas, not one of the facts had been left unexplained by the undulatory theory. It accounted for all the phenomena of reflection; for all the phenomena of refraction, single and double; for all the phenomena of diffraction; for the colors of thick plates and thin, as well as for the colors of all natural bodies. It accounted for all the phenomena of the colors of all natural bodies. natural nodies. It accounted for all the phonomena of polarization, for all those chromatic splendors exhibited by crystals in polarized light. Thousands of isolated facts might be ranged under each of these heads; the undulatory theory accounted for them all. It traces and illuminated paths through what would be otherwise the most hopeless jungle of phenomena in which human thought could be en-

This, said Professor Tyndall, was why the foremost men of the age accepted the luminif-erous ether, not as a vague dream, but as a real entity—a substance endowed with inertia, and capable, in accordance with the established laws of motion, of imparting its thrill to other substances. It was Dr. Thomas Young, his own predecessor in the chair of Natural Philosophy in the Royal Institution in the first year of the present century, who finally overthrew the emission theory. Young never saw with his eyes the waves of sound, but he had the force of imagination to picture them, and the patallice. to investigate them. And he rose from the investigation of the unseen waves of air to that the unseen waves of ether, his belief in the one being little, if at all, inferior to his belief

DR. DRAPER'S DEATH A CALAMITY. The February number of The American Jour Science closes its sketch of the late Dr

Henry Draper with this paragraph; "Looked at from any point of view the death of such a man as Henry Draper cannot be viewed but as a calamity. At the age of forty-five years, with very many years of good work apparently before him, with the experience and learning of the twenty years part added to a view and year. the twenty years past added to a rich and va-ried natural endowment, giving promise of a scientific career of exceptional brilliance, it is no wonder that the world of science mourns his departure. Moreover he seemed to be just ready for his life-work. He had completed the build-ing and equipment of his observatory and labo-ratory, and had arranged executivy and laboratory, and had arranged everything ready for experiment. He had given up his professorship and was reducing his business cares in order to get more time for research. He had stored his mind for years with precious facts which he hoped now to utilize in the highest investigations. Finally be had a most devoted wife, who always acted as his assistant, and to whose to the akilled hand and thoroughly trained eve he has

attributed much of the success he had alread attained. Such men it is that the world is made poorer by losing. They are all too few, and when one drops from the ranks of honest and earnest workers, the gap is never completely filled."

OLDEST TREE IN THE WORLD. The oldest tree in the worl' says Knowledge, so far as anyone knows, is the Bo tree of the sacred city of Amarapoora, in Burmah. It was planted 288 B. C. and is therefore now 2,170 years old. Sir James Emerson Tennet gives teasons for believing that the tree is really of this wooderful are and refers to historic dom. this wonderful age, and refers to historic documents in which it is mentioned at different dates, as 182 A. D., 223 A. D., and so on to the pres-ent day. "To it," says Sir James, "kings have even dedicated their dominions, in testimony of belief that it is a branch of the identical fig-tree under which Buddha reclined at Urumelya when he underwent his apotheosis." Its leaves are carried away as streamers by pilgrims, but it is too sacred to touch with a knife, and therefore they are only gathered when they fall. The king oak in Windsor Forest, England, is 1,000

TRUE BEAUTY.

years old.

May I find a woman fair.
And her mind as clear as air;
If her beauty goes alone,
'Tis to me as if 'twere none.
May I find a woman rich.
And not of too high a pitch;
If that pride should cause disdain
Tell me, lover, where's thy gain?
May I find a woman wise.
And her falsehood rot disguise;
Hath she wit as she hath will,
Double arm'd she is to ill.
May I find a woman kind,
And not wavering like the wind—
How should I call that love mine,
When 'tis his and his and thine?
May I find a woman true:
There is beauty's faires hue;
There is beauty, love, and wit;
Happy he can compass it.

GLADSTONE'S MARVELLOUS FRAME.

Over and over again the Premier has displayed a power of readjustment which makes his constitution resemble that of his native country, and in pires resemble that of his native country is not that the historical hi over and over again the Freiner has displayed a power of readjustment which makes his constitution resemble that of his native country, and in pures the general conviction that he will soom "be himself," More than a generation has passed since, in conversation with a friend, Mr. Sidney Herbert, being at the time the most popular member of the House of Commons remarked: "Don't talk to me about Gladstone's mini-it is nothing compared with his body!" Mr. Herbert's words about, Mr. Gladstone's physical frame have been fully borne out. Often has the Prime Minister been examined, seemeded, ausent ated, and what not, by medical friends, and, without a dissentient voice, they have all pronounced him to be smade of pin-wire." It has frequently been remarked that great crators are cenerally bad sleepers, the strain upon heart and brain demanded by an oratorical effort of musual length, magnitude and i apertance being of a nature to excite the nerves of the speaker to the highest degree of tension. To some natures the preparation for and a ticipation of a speech are even worse than the agitation caused by its delivery. But no speech, though portonized, as has often been the case with him, for five hours or more, has, as a rule, been able to bouish sleep from Mr. Glads one's evel is. During the whole of his life, until within the last few days, it has been his chason to say: "I am good for seven hours and a haif." As a rule, Mr. Gladstone's head no sooner touches the pillow than he is locked in sound slumber.

Slight as Mr. Gladstone appears in person, it was still a marvelious trame that, long after his hitherly brithday was passed, he banded over to the professional charge of Dr. Andrew Clark. Most skifful y, indeed has that emisera physician assisted Nature to abstain from "fretting the body to decay" by strains such as not one main a a million comis survive to put upon it even after his fifteth—let alone his sixtieth or seventieth—birthday had gone by. Upon many public occasions, Mr. Gladstone has deciphed to go out of

asionally insubordinate patient—to Dr. Ardro

against his further use of a fording-neces but it was not until some years later that he took to the amosement of cuttag down trees.

Throughout his lite Mr. Gladstone has been a particularly last, enduring and vigorous walker. He is east, indeed, in the mould be which all famous pedestrians belong. Why, lean, smewy, without an oance of superfluous lumber about him, Mr. Gladstone when a younger nam was in the nabit of saying, but without a incture of vamity or osteriarion, that he was good for a for yemile walk any day. Although his the again has east lither lighter are as well known in every part of this metropolis as those of any resident within its corders, who ever yet saw Mr. Charlstone in a hausom or any other cab? It was not without difficulty, smoother cab? It was not without difficulty, smoothing the weak lite of the following the control of the following the control of the following the following the following the control of the following from feeling the following the following from feeling the following the following from feeling the fold, he frequently wears a fur muffer round his throat, linked with

THE CZAR'S DEVICES.

From The London Globe.

A complete circun location office of mystlification was devised for delaying piots and threwing dust in the eyes of conspirators. In one case, which has hitherto escaped record, the Nihilists were suspected of having driver a mine beneath the railway into from Galachina to St. Petersburg. Under the pretence of a desire to recover an old telegraph wire said to have been lost thirty years ago such was the story told by the official and copied by the non-olicial press, a large staff of workmen were employed to search for the hidden danger. Nothing, nowever, was found—not even the lost wire. In the meantime, the Czar wished to pay one of his rare and rapid, but almost always noctarnal, visits to the capital. What was to be done? The police decided upon a ruse. The imperial railway carriage was ostentationsly brought from its shed, and as ostentationsly made to perform the journey between Gatschina and St. Petersburg on a date ostentationsly given as that of the Emperor's arrival. The empty carriage arrived without accident, thus proving the safety of the line; and when the real journer the safety of the line; and when the real journer the safety of the line; and when the real journer the safety of the line; and when the real journer the safety of the line; and when the real journer the safety of the line; and when the real journer than the safety of the line; and when the real journer than the safety of the line; and when the real journer than the safety of the line; and when the real journer than the safety of the line; and when the real journer than the safety of the line; and when the real journer than the safety of the line; and when the real journer than the safety of the line; and when the real journer than the safety of the line; and when the real journer than the safety of the line; and when the real journer than the safety of the line is the safety of the empty carriage arrived without accident, thus prov-ing the safety of the line; and when the real jour-ney took place a little time afterward, its secrecy was well kept, the Czar travelning, in the most lit-eral sense, "darkly and at dead of night."

THE MODERN YOUNG ENGLISHMAN.

Perhaps it may be said that, on the whole, our young men to-day are not much better than they have been at any past time. Unquestionably they have their faults, their vices, and their affectations. But in some respects they do indicate a material improvement upon their predecessors. If they are often as deficient in ideas, and in generally intellectual tastes, they pay much more attention to the refinements and amenities of his. They do not parade coarseness or grossness in their manner or in their conversation, as formerly it was esteemed the mark of an esprit for to do. They have, in a word, far less suspicion of what has been called "British brutality" about them; they conduct themselves informly more like gentlemen and less like grooms. Nor can it be said that this grave bearing and speech has been purchased as any sacrifice of grooms. No can it be said that this grave bearing and speech has been purchased at any sacrifice of manliness. The young Englishman of to-day preves himself, whenever opportunity occurs, true to the best traditions of English courage and endur-

RELIGIOUS INTELLIGENCE.

THE AUTHORS OF THE BIBLE.-Sermons

on and about the Boble are now being preached all over the country. Some of these are merely angry reiterations of traditional and

merely angry reiterations of traditional and untenable positions by sincere but ill-informed men, and may be passed by with indifference. Others ably marshal all the arguments in favor of the traditional view of the Bible, with candor and honesty, and deserve respect. Still others embody the results of the latest and best scholarship, and attempt to preserve all that is really inspired and true in the Bible, they for the mistakes and accretions of trathat is really inspired and true in the Bible, free from the mistakes and accretions of tradition. The Rev. Dr. F. L. Hosmer, of Cleveland, in a semion last Sunday, spoke wisely and reverently about this venerable book. "What does it signify," he asked, "if Moses did not write the Pentatench; if the Book of Deuteronomy does belong to an authorship seven centuries later than was once supposed; it very few of the Psalms ascribed to David were written by him; if the age of that monwere written by bim; if the age of that monarch was far less advanced really than later generations as they looked backward imagined it, and if our whole review of ancient Jewish civilization and the growth of its religion from low and savage forms into its full ethical and hobly theistic flowering at last must be largely modified by new and more thorough investigation and research? The same vehemence of feeling is not wont to be aroused elsewhere in such doubtful questions. aroused elsewhere in such doubtful questions. There is the 'Imitation of Christ,' a little work of devont meditarions upon the inward and outward life which, as I have read, has been ontward file which, as I have read, has been surpassed in the editions it has passed through and the number of copies printed by only one book, and that is our Bible. It has become a manual of devotion. There has always been some doubt as to its authorship, though ascribed to Thomas a Kanania. But the proof. some doubt as to its authorship, though as-cribed to Thomas á Kempis. But theories of some other authorship sometimes advanced have not awakened any strong feeling, or led men to say that the value of the book was gone if Thomas á Kempis did not write it. Again, as you all know, there are some persons who argue with much plausibility that the plays of Shekener. of Shakespeare were not written by this man, but by Lord Bacon, and while we would all be loath to take such a crown from the brows of the man to whom it really belonged and set it upon another's, yet we should not feel that the great value of these works was essentially impaired to us if it should sometime be preven that we had all along been mistaken in their authorship. Again, we have many hear-tiful hymns, metrical psalms we may call them, to be found in nearly all church collec-tions. Suppose it should be discovered that one hitherto ascribed to Charles Wesley was not written by him, but by some unknown man or weman living a little before or after. Should we feel that the hymn was henceforth value-less, or that the man discovering the fact was undermuning our faith? Why then should we be much disturbed by a theory that David did not write this or that usadm or hymn in the ancient Jewish collection? Why distarbed by theories of non-Mosaic authorship of Deuter-onomy, or greatly troubled in our religious be-hef at the probability revealed to us now that it makes a condition of the Jewish people far advanced beyond its civilization in Moses's time? How can it touch our faith deeply to-day to know that Eccusiastes was not written by Solemon but many centuries later, or that the Book of Daniel is nearly three centuries later than the scenes it describes and is more like a religious story, written for its moral, than a record of actual historical events? Why are people so tenacious of once accepted we feel that the hymn was henceforth value then a record of actual historical events? Why are people so tenacious of once accepted views, and hostile to all criticisms, however scholarly and reverent, which disturb them regarding this tica mine of Hebrew literature that has come down to us, when they do not mind similar changes of view in all other history and literatures, including their own?

From how It whose a misched vector of the control to and touch the Mr. Globaron is of the organ at the final control to and touched the Santa and the final control to and touched the Santa and the final control to and touched the Santa and the final control to and touched the Santa and the final control to and touched the Santa and the final control to and touched the Santa and the santa and the final control to and touched the Santa and the sant men are much more radical in England than they are in this country. The Rev. Mr. Haweis, a clergy man of the English Chutch, recently preached on "Brahminism and Buddh-ism." In the cause of his sermon he said that every religion was in its essence sacrea, as the secret yearnings of the soul after the Un-

Who is the God to whom we shall sacrifice I Who is the tool to whom we saw as a life who brigators the sky. He who makes from the earth, He who measures the air. He win tooks over the water clouds; He is the tool to whom, etc.—

cords which remind us of other Scriptureswords which remind us of other Scriptures—
"God is tight," "Our God is a consuming fire,"
"Offer sactifices unto the Lord," etc. The
Brahmins taught that man was brought
through sin into collision with the Brahms—
the source of thought—who was also spoken of
as Agui, the purifier, though at other times
Agui assumes a minor personality. Hear the
Linany, a thousand years before Christ, rising
by the shores of the Ganges:

May on the temporal of

May our sin be repented of. Have mercy, Almighty! Have mercy, Almighty!

If I go along trembling like a cond,
Have nercy, Almighty!

Thirst came upon the worshipper in the midst of the waters.

Have Mercy, Almighty!

Through want of strength, thou beign God, nave ome to the wrong shore.

Have mercy, Almighty! But, as Kreeshna, the Divine Power, draws very near to man, inspires his actions, enters into I is pursuits, "I," says Kreeshna (a kind of Emanuel or God with us) to the young warrier. Arjoon, "I am the sacrifice, I am the fire, I am the victim, I am the father and mother of the world, I am the road to the good, I am the region for the witness. The witness the sacrifices the witness. conforter, the witness, the asylum, the friend"; and then follow words to be pon-dered reverently by all missionaries who ignorantly trample upon the religion they would rather seek to purify, "They who serve other Gods with a firm belief in doing so really

serve me."

A prominent Episcopal clergyman of Cleve-land, the Rev. Y. P. Morgan, thus explains the position of the Episcopal Church in regard to biblical inspiration: The church has never put forth or adopted any theory of inspiration. She simply declares Holy Scripture to be the word of God, and containeth all things neces-sary to salvation, and I would venture the asword of God, and contained all things necessary to salvation, and I would venture the assertion that Mr. Newton still recams allegiance to his ordination vow. Protessor Ifuxley has said the Protestant elegy may be divided into three classes: "Those who are informed and are silent. day; those who are informed and are silent, some cruth in his statement, or else the major ity of Protestant preachers deem it ill-advised not cowardly, to proclaim even "truth" without discrimination. In all these discussions it nust be remembered that criticism of Scripture is one thing, the practice of it another. He best apprehends truth who lives it. The chemist understands the gracies of the The chemistrudge stands the gracies.

Rev. Dr. Hayman, agrees with Bishop Light-foot, the Rev. Dr. Hatch and the late Dean Stanley, that the common Anglican theory of the divine origin of Episcopacy is utterly groundless. He says that there is no historical basis for this theory; and he urges "the revival of the rights of the presbyters as the governing body or council of the church," and that "the carly bishop stood to his prestyters in the rela-tion of a chairman to the ordinary members of a committee." He has just read a paper making these points at a public meeting at Sion College

used to tell the following good story at the expense of the Episcopal Church. During his visitations through the State, the Bisnop fell in with an old school comrade who had recently been made Chief Justice of the State. The Bisloor reminded his friend of old times and congratulated him upon their success in life, and the honorable position in which they found each other after their long separation, con-cluding, "And better than all, Jadge, I find you are a member of our Church." "Well," said the Judge, "that's more a matter of chance than anything else. You see, when I was get-ting established in my profession, wife and I thought we ought to join some Church; 'twas more respectable. So after mature delibera-tion we settled down with the Baptists and got on very well for a time, but they kept harping on faith, faith, till we prelty soon discovered that they required more faith than we had, so it became necessary to make a change. We turned the matter over considerably, and at last, from various reasons, made up our minds to join the Methodists. Here we found the demand was work, work, incessantly, and it was presently apparent that they demanded more work than we were able to perform. It was with great reluctance that we concluded that we must change again, and cast about with much, canties, that this mach might be find. much caution that this nove might be final At last we decided to contect ourselves with your Church, Bishop, and have got tamously ever since without either faith or

Here is a chance for some zealous young person to preach the Gospel on nothing a year and find himself. It is found in a letter from the English Bishop of Peterborough, to The Church Guardian. "There is a country living now yacant in my diocese," he says, "and in my gift, for which I have in vain endeavored to find an incumbent. It was, before the late agricultural depression set in, worth £450 a year net. It is at present worth nothing— the income barely sufficient to pay the charges upon it. Should better times for agricultur-ists ever arrive its value will, of course, improve, and six years hence one of the charges on it will expire. Meanwhile, whoever accepts it will have a comfortable house in good condition, a beautiful church, and an interesting sphere of work among a village popula neighborhood, but no certain meome. If ther should be among your readers a clergyman for whom such a post has attractions, and whose private means enable him to disregard the question of income from the living, I shall be

The Rev. Washington Gladden, formerly of Springfield, Mass., but now of Columbus, Ohio, Springfield, Mass., but now of Celumbus, Ohio, thus pays his respects to one of Boston's great men: "Joseph Cook, after circumnavigating the world, during which time he succeeded in mystilying the Hintons, stirring up the Manometans and teaching the juggless of Japan new tricks, had returned to be alon, kindled his ketosene torch, spread his samples and began again to cty his wares in Tremont Temple, lie had set himself up as a champing of the ing had simply substituted for the latter the old hard-shell Universalism. All the altera-tion he had made in the chief article of the new creed was that he had changed probation after death to probation after breath. What Joseph was doing was whipping the devil atoutd the stump, and if, as in this instance,

General Booth, of the English Salvation Army, in his year book says: "During the year 1882, 609 of our seldiers, to out knowledge, have been knocked down, kicked or otherwise brutally assaulted, 251 being women and 23 children under fifteen. No less than 56 of the buildings used by us have been attacked, nearly all of the windows being broken in many cases, and in many others even more serious damage being done. Meetings have sometimes been broken up by stones crashing sometimes been broken up by stones crashing through window or roof."

CURRENT RELIGIOUS OFINION,

One of the Hartford papers publishes the following:
Several of the Congregational ministers of this city have decaded to future to use the Episcopal ritual in services for the burial of the dead from private residences, and to omit remarks upon the life and character of the decased, preferring, if necessary, to deliver such remarks in special sermons.

This is a move in the right direction. There is in This is a move in the light, as they once called all the non-liturgical bodies, as they once called themselves, a very general desire to abandon the extemporaneous habit and to adopt some, settled form of worship. But this change must come grad-ually. It would not be wise to pass immediately from the old to what will be with them a new frame a special littrey for themselves. The minis-ters here referred to have taken a single-step. They have resolved to use "the Episcopal ritual in ser-vices for the burial of the dead." In the course of time, we trust, they will adopt other services of the Prayer Book, and it will be a happy day for them when they resolve to use the whole of it. We re-joice for them and with them because of what they joice for them and will the Churchman, have already done. - [The Churchman,

The Bishop of Durham, England, proposes that The Bishop of Purham, England, processes that the Establishment adopt the Methodist local preacher; this is what he means, we suppose, by a male diaconate, into which into ligent men may enter without refunquishing their secular vocations or having any intention of being advanced to the priesthood. He also proposes a female diaconate; but its duties are, we believe, not those of a preacher. We should watch an experiment of this lay character which it is proposed to give them would have an advantage in calling into this service the best laymen. Mr. Gladstone, for example, is a sort of lay preacher already—and a most excellent one.—[The Christian Advecate.]

A new idea has struck Babu Kestub Chunder is one thing, the practice of it another. He best apprehends truth who lives it. The chemist understands the analysis of air. The laborer does not, yet both live through the same, and the chemist's critical analysis would little avail did he not use his lungs. The most learned criticism of the Hely Scripture will not make man holy unless he obeys the precepts, and he who obeys is not injured by the criticism. Whatever opinions men may hold concerning the word of God, I pray it may ever be the "rule of faith and practice." Another well-known clergyman of the English Church, the

HOME INTERESTS

PRICES IN THE MARKETS. THE GAME SEASON CLOSED-PRICES OF TISH STILL HIGH-VEGETABLES AND FRUITS.

The most noteworthy feature of the markets during the last week has been the close of the game season. The game lows of this State prohibit the sale of quail, grouse, partridges, woodcock, rabbits and hares after February 1. The large quantity of game included in this 'ist that remained in the hands of be dealers has disappeared from the view of the observer who walks through the market stalls. A great part of it was shipped, according to an annual custom, to Bosion and other Eastern cities, where the game-laws differ from those of Nev. York. The remainder has been sold by the dealers surrepti-

Fresh plover are from \$1 50 to \$2 25 a dozen, tame piccous \$2 to \$2 50 a dozen. English frozen snipe \$2 50 to \$3 a dozen, wild turkeys 28 cents a pound, wood-ducks 50 to 75 cents a pair, canvas-back ducks \$2 to \$2 50 a pair, mallards 60 to 80 cents a pair, teal 60 to 80 cents a pair, tame squabs \$3 50 to 84 a doz n; wild bigeons \$2 a oz n, and stall-fed pigeons \$2 50. Pigeons of every variety are plentiful in the market. Small biras are \$1 a dozen; rail birds \$2 a dozen; reed and rice birds, \$1 25 a dozen. Guines bens are from 75 cents to \$1 a pair, and brant \$1 50 a pair. There is some bear meat in the market which sells for 25 cents a pound.

Foully ventifues to bring good degrees but the

Foulity continues to bring good figures but the sub-ly is becoming more nearly equal to the demand. Ducks are from 23 to 25 cents a pound, turkeys 20 to 22 cents, Philadelphia broilers 24 to 26 cents a pound, city-dressed broilers 20 cents, spring geese 20 cents, Boston geese 20 to 22 cents, caoous 28 to 33 cents, and large roast chickens 25 to 26 cents a pound.

canons 28 to 33 certs, and large roast chickens 25 to 26 cents a pound.

Porter-house steaks are from 25 to 30 cents a pound, choice cuts 18 cents, sirbin 20 to 22 cents, chick roast 14 to 16 cents, round steak 16 to 18 cents, stewing pieces 10 to 12 cents, soup meat 8 to 10 cents, sust 13 cents, corn beef 8 to 14 cents, beef tenderloin 40 to 75 cents a pound, beef kidneys 10 to 12 cents each beef tongues 14 to 15 cents, and smoked beef 16 to 20 cents a pound. Hind-quarters of spring lamb are 14 to 16 cents a pound, forequarters 10 to 13 cents, mutton forequarters 9 to 10 cents, mutton forequarters 12 to 14 cents, mutton shoulder 7 cents, mutton chops 12 to 14 cents, forequarters of Canada lamb 12 cents a pound. Sweetbreads sell at \$1.50 to \$3.50 a dozen, valued aboulders 10 cents a pound, breast of yeal 9 to 10 cents, yeal entites 22 to 30 cents and yeal chops 18 shoulders 10 cents a pound, breast of veal 9 to 10 cents, yeal entlets 22 to 30 cents and yeal chops 18 to 22 cents a pound. Smoked hams bring 15 to 16 cents, nickled hams 15 to 16 cents, the claim at hams 18 cents, shoulders 12 cents, sausages 14 to 15 cents, smoked sausages 14 cents, Belogua sausages 14 cents, bacon 16 to 18 cents, dried English bacon 15 to 17 cents, roasting perk 13 to 15 cents, pork tenderloin 16 to 18 cents, trine 7 cents, corned pork 14 to 15 cents, corned tongues 14 cents, boncless shoulders 15 cents, fresh pig bins 16 cents, and head che we 12 cents a pound. Roasting pigs are \$2 50 to \$3 cach, and fresh loins 14 to 15 cents a pound.

ine pigs are \$2.50 to \$3 each, and fresh joins F4 to 15 cent's a pound.
The dealers of Fulton Market still complain of the scarcity of fi.d. Following the storms of last month came the cold wave winch froze up the rivers and barbor and formed so large a mass of floating fee that the fishermen could not g t to their grounds. The dealers are casting anxions eyes at the weather reports, for Lent begins on February 7. Unless the snoply of fish is greatly increased before Wednesday the beginning of Lent will see higher prices for fish than have been known for many years.

the beginning of Lent will see higher prices for high than have been known for many years.

Brook pike are 16 cents a pound, whitefish 18 cents, common cod 12 cents, State cod 15 cents, eats 16 cents, flounders 10 cents, haddock 10 cents, striped bass 18, 25 and 30 cents, haddock 10 cents, sarp pel bass 18, 25 and 30 cents, haddock 10 cents, carp 12 cents, black bass 16 to 18 cents, salmon trout 16 cents, skinned carrish 12 cents, pike 15 cents a pound, fresh mackerel 15 to 20 cents can, sheepshead 25 to 30 cents a pound, smelts 15 to 18 cents, yellow perch 10 to 12 cents, while bass 15 cents, king fish 25 cents, Spanish mackerel 40 to 50 cents, and frozin Kennebec salmon 35 to 40 cents a pound. Scallops are 25 cents a quart, hard

live lossiers 12 cents a pound, and live sarings 80 cents a quart.

The prices for salted and smoked fish and shell-fish keep pace with the rest, though it is difficult to say for what reason except sympathy. Smoked salten bring 25 cents, smoked mackerel 15 to 22 cents a pound, soaked mackerel 10 to 25 cents each, dry cod 9 to 10 cents a pound, libility sulmon 25 cents, smoked halbent 20 cents, smoked sturgeon 25 cents, boneless codish 12 to 13 cents, codish to gase and sounds 15 cents, smoked celt 25 cents, dominish 15 cents, peanut clams 25 cents a pound, bloaters 15 cents per buoch, pickled oysters \$1.50 to \$2 a hundred, pickled salmon 20 cents a pound, sewing oysters 75 cents a hundred, frying oysters \$1.50 to \$2 a hundred, hard clams 75 cents a hundred, sait white fish 15 cents, and Finnan haddes 15 cents a pound.

Fancy Eigin butter is 40 to 43 cents a pound, Creanery 35 to 36 cents, and good butter 23 to 33 cents. E. gaare from 25 to 33 cents a cozen. The prices of these two important articles of food will be low if week by week as the spring advance s.

Flerida tematoes are selling at 30 and 40 cents a quart, and conniders from the same State bring 50 cents ach. The prices of other very from the same State bring 50 cents ach. The prices of other very from the same State bring 50 cents ach. The prices of other very from the same State bring 50 cents ach. The prices of other very from the same state bring 50 cents ach. The prices of other very from the same state bring 50 cents ach.

MENU. MENU.
Corn and Bean Scop.
Broiled Soad.
Chicken Fie with Oysters.
Roast Lanch, Mint Sance. Sweet Potatoes.
French Articlokes, Cream Sance.
Quaif on Toest. Currant Jelly.
Cabbage Salad.
Roquefort Cheese. Hard Unckers.
Mince Fie. Velvet Cream. Orange Ice.
Fruit, Nuis and Raisins.
Coffee.

HOUSEHOLD NOTES. CORN AND BEAN SOLP.—Take two pounds of beet, a point of park, a pint of black or navy beans isoaked over night), a large onion, a small carrot, a head of celery. Put the above ingediests into the soup pot with a gailion of cold water, and let simmer gently for five or six hours. Take off and let get cold; remove the grease, and place on the stove to boil again. About au hour before dinner add a quart of canned corn. Strain the soup, season with Cayenne peoper and salt, and serve it with or without the addition of boiling cream.

CHICKEN FIR WITH OYSTEYS.—Boil the chicken—a year old is best—until fend-r, drain off liquer

CHICKEN FIE WITH OYSTEUS.—Boil the chicken —a year old is best—until fend r, drain off liquor from a quart of oysters, bod, skim, into the sides of dish with a rich crust, but in a layer of chicken, then a layer of raw oysters, and repeat until dish is filled, seasoning each layer with bits of butter, pepper, salt, and a ding the oyster liquor and a part of the chicken inquer until the liquid is even with the top layer; now cover loosely with acrust having an opening in the centre to allow steam to escape. If the liquor cooks away, add chicken gravy or hot water. Bake forty minutes in a moderate oven. Make gravy by aiding to chicken liquor left in potione quart or more) two tablespoonfuls of flour, rubbed smooth with two tablespoonfuls of butter, and seasoned highly with pepper; let cook until there is no raw taste of flour, and serve.

CARRAGE SALAD.—Put a cup of vinegar and a cup

cannage Salad.—Put a cup of vinegar and a cup of mils on to heat in separate salec-pains; when the vinegar bolis aid butter, surar, salt and pepper, and stir in about two quarts of finely chopped cabbage; cover, and let scald and steam—not boil—for a moment; meanwhile remove milk from stove, cool a fit le and sir in the well-beaten and strained yolks of four eggs; return to stove and boil a moment. Dish the cabbage and pour custard over it; stir rapidly with a silver spoon until well mixed, and set at once in a cool place. Serve when ice cold. This is a delicious salad, if made with judgment.

Laycashing Fig.—Take cold beef or yeal or mut.

This is a deficious said, it made with judgment.

LANCASHIER PIE.—Take cold beef or vealer mutton. Chop and season as for bash; have ready hot masked potatoes seasoned as if for the table, put in a shallow baking-dish first a layer of meat, then a layer of potatoes, and so on, till dish is heaping full; smooth over top of potatoes, and make little holes in which place bits of butter; bake until a pure brown.

jelly-cake pans, and spread leing made with the whites of two eggs, and half a pound of sngar, be-tween the cakes. Sprinkie grated coccanut thickly

over each layer. VELVET CREAM.--Half an ounce of Russian isin VELVET CREAM.—Half an ounce of Russian issu-glass dissolved in one and a half cupfuls of white wine, the june and grated peel of a lemon, three quarters of a pound of loaf sugar. Simmer all the ingredients together until well mixed, then strain and set it away to cool. Then add one and a baif pints of cream, and stir until it is quite cold. Pour it into a mould and set it upon ice to become as stiff as biancemange.

Orange ICE —Squeeze the juice from six large oranges and two lemons; pour about five gills of boiling water over the broken peel and pulp and let it stand until cool; then strain and add the water to the orange and lemon large. mon jaice. Sweeten to taste with loaf sugar and freeze.

A MORNING IN A COOKING CLASS.

WEALTHY YOUNG WOMEN TAKING LESSONS. THEIR ENTHUSIASM OVER THEIR WORK-MISS PAR-LOA'S SYSTEM OF INSTRUCTION.

It has been said that "the fate of nations depends

on how they are fed." If that is true, the interest now shown in this city in the science and art of cooking must be considered full of promise for the future of New-York. Culinary studies seem to offer attractions rivalling those of decorative art and the various other pleasant occupations which wealth and pleasure permit. Said a young lady a day or two ago: "I have declined to jom a tennis club, a whist club and an Italian class, and care only for my cooking class." She is one of half a dozen fair representatives of wealthy families associated for the purpose of studying cooking practically. This with many young ladies/signifies much more than a passing amusement, for it is said to have become a common arrangement for mothers to relinquish either the whole or a part of the domestic management to daughters living at home. In this way whatever may be learned in the kitchen classes is of immediate value. The study and practice are continued regularly from day to day by successive groups of ladies assembling in a large and cheerful room looking upon the windows and side walls of St. George's Church. A highly polished working stove near a wainscoting of tiles is a conspicuous object cases of china ware closed with glass doors stand on either side; at the centre of the room, with its brightly painted floor, is a table with an oil-cloth cover and at this each lady takes her seat, wearing a large white apron and having in her hand a cookery book in the "kitchen edition." Half the number in a class may be youthful matrons with the dignity of having houses of their own newly upon them. A housewife aress worn by one of these matrons at a lesson last week was very pretty and becoming. This was flowered chiatz, with a frill of pleated white lare falling at the foot, with the same bordering the overskirt and laid in rows down the trimly-shaped waist; the colpleating, with edges meeting, and with strips of the bright chintz alternating with the lace, folded outward from the fine collar of linen next the throat. Over the dress was fied a full white apron, and low upon this swung the note book in a long oop of rose-colored ribbon fastened at the waist and having a gold pencil attached. The white and beautifully modelled arms were encircled with gold

bracelets. No time is wasted in entering upon the business of a morning. This includes the preparation of a dish or cents, and frozen Kennebec salmon 35 to 40 cents a pound. Scallops are 25 cents a quart, hard crabs 40 cents a dozen, builed lobsiess 15 cents and live lobsies 12 cents a pound, and live surimps 80 cents a quart. ranged by members of a class that the advantage of practice with different dishes may be

severed the clear red pornous from the bones, divided the difference between fat and gristle, of which the latter was to be retained because "nice to have little bits of it" in the brath Equal care was observed in the preparation of vegetables brought together in this dish. A carrol was carefully out into pieces as exactly alike as gold engies; some turnips were freated in the same way, and an onlow was cut into the circ. All the bones were gathered into one samespan, the meat with the vegetables and some barrey into another, the cold water added to each, and all to be gently summered. According to a former pupit's expression of the lidea of previous rapid challation, this dish must only smile. The injunction was well remembered, and tender fingers were burned more than once in hastly lifting the lid for assumance that the Scotch broth was properly restrained to a "stake."

As one after another became fully engaged with her parteniar dish, receiving institutions and all the different points, the scotch broth was properly restrained to a "stake."

As one after another became fully engaged with her parteniar dish, receiving institutions on all the different points, the scotch broth was properly restrained to a "stake."

As one after another became fully engaged with different points, the scotch with was properly restrained to a "stake."

As one after another became fully engaged with a criterion on the batter for the apple undding, which says son on the batter for the apple undding, which says since the agree with the view as strong as much practice with tastidious cars mixed her queen fritters. Cold boil dipointoes were cut into mataematically correct class for one of the dish s, not the Tartare sance was concocted deliberately with eggs, oil, vinegar, mustard sugar, pepp 1, sat, oning place, chopped cap ris and chopped encamber pickers.

cally correct choses for one of the dish s, and the Tartare sauce was concocted deliberately with \$223, on, vinegar, mustard, sigar, pepp \$1, 834, only nigar, only nigar, and chooped chember pickes. Eaca pupil found sufficient opportunity during the performance of ner own work to observe that of all the others. Meantine the snotlest of odors were ascending from the mutton pot; thence now and then moved the teacher for observation, and additional precept. When the contents of the saucepan with the bones had been stronged into that containing the meat and vegetables this deacetable product from the scraggy need of mutton was declared complete.

As much in carnest as the young ladies were, there was no lack of merry words. A little ripple of laughter went round when one of the married students referred to the disagreeable manners of her French cook. But the work of the morning was "shapely" as the lady wished, the queen fritters were fair compensation for bending over boiling lard until pearly ears became scarce. At the same time the cook of the snelts aipped these, in the wire basket, into hot fat deep enough to float them, and they came out in two minutes and a half, necording to the book, a handsome orowin, and were placed on a sheet of brown paper to drain. The le son lasted from 10 o'clock till tong past 1, when all was minshed, and the members of the class lunched on the products of their skill.

THE TRAVELLING CURE.

Norman Lockyer in Nature, Jan. 11, 1883.

Three years ago when travelling in America, one morning, at a little station—we were approaching the Rocky Mountains—I was astonished to see a very old and venerable French cure in his usual garb enter the car, and as he was evidently in some distress of mind, and as evidently had little command of English. I asked him in his native language if I could be of any service to him. There was a difficulty about a box which I soon satiled, and then we sat down and entered into conversation. He soon found out that I was very much astonished to see him there; and told me so. I acknowledged it.

"It is very simple," he said. "I am very old.

ton. Chop and season as for bash; have ready hot masked potatoes seasoned as if for the table, put in a shallow baking-dish first a layer of meat, then a layer of potatoes, and so on, till dish is heaping full; smooth over top of potatoes, and make little holes in which place bits of butter; bake until a nee brown.

ORANGE CARE.—Twelve eggs, the weight of ten in pulverized sugar, the weight of six eggs in flour, the junce and grated peel of one orange, and half a lemon. Beat it like sponge cake, and bake it in jelly-cake pans. Take the whites of two eggs, half a pound of sugar, the juice and grated peel of one orange and half a lemon. Beat it and spread it between the layers of the cakes. Try this cake. It is a favorite.

Snow-Flake Care.—Take one cupful of butter, and three cupfuls of sugar, and beat to a cream; add a cupful of sweet milk, one tablespoonini of baking powder; three and a half cupfuls of flour well sifted, and the whites of ten eggs. Bake in